# **Fence Installer**

A student who has completed the Job Corps Fence Installer program is equipped with the skills to contribute to the workplace as a valued employee from day one. Competence in academic and vocational skills is required for graduation. In addition, Job Corps students learn employability and technological skills. To complete his or her Fence Installer training, a student must master skills in these categories:

## ■ Safety

Pass a test on shop, field, welding and cutting safety; complete the fall protection program and secure certification.

## ■ Mathematics

Use a tape measure to 1/16" accuracy; reduce fractions to the lowest common denominator; perform addition, subtraction, multiplication and division of fractions; convert fractions to decimals: write decimals as fractions.

#### ■ Ladders and Scaffolds

Select, position, raise and lower ladders safely; demonstrate safe and proper use of scaffolding.

## **■** Measuring Tools and Equipment

Identify basic measuring tools (i.e. tapes, squares, levels, etc.) and their functions.

# **■ Field Layout**

Perform fence layout; project straight and perpendicular lines in the field; use the string and eyeball methods of post placement; use sight poles in post layout; properly use set-back pins in post placement.

# ■ Post Setting

Understand factors determining the hold size, depth and shape; dig postholes with hand tools and an auger; drive post with a hand pounder; prepare concrete using bag mix and hand mix; set posts using concrete, tamped earth and anchors.

## **■ Chain Link Fence**

Identify the use of framing parts and fasteners; erect various chain link framing schemes, including get and end bracing; install tension wires; splice, stretch and dress chain link fabric; perform bias cutting of chain link fence; knuckle cut fabric; perform methods of tying fabric.

#### **■ Wood Fence**

Perform assembly of and erect wood fence.

## **■ Oxy/Acetylene**

Describe Oxy/Acetylene equipment, tanks, threaded connections, etc.; perform proper setup, use and shut-down of equipment; make cuts on steel 1/8", over 1/4".

# ■ Welding

Use 1/8" 6010-6011 welding rod to make welds for the five weld types in each of the five positions on 1/8" plate; use 1/8" 6013 welding rod to make welds for the five weld types in each of the five positions on 3/16" plate; set up and use GMAW equipment to weld steel.

# Fence Installer (cont.)

#### **■ Hand Tools**

Demonstrate safe and proper use and general maintenance of the following tools: bow saw, cable puller, carpenter's square, cat paw, digging bars, fence and hoof ring pliers, files, hacksaw, line levels, pipe cutters, post drivers (driving sleeve), posthole digger, post puller, protractor, pull jack, shovels, spreaders and eveners, tape measures (25' and 300'), torpedo level, truss rod bender, vice grips, vise, wheelbarrow, wire dogs and wrenches.

# **■ Power Tools and Equipment**

Demonstrate safe and proper use and general maintenance of the following power tools and equipment: air compressor, chain and circular saws, compound miter saw, concrete mixer, cordless screw gun, cutoff saw (gasoline powered), drill press, electric drills, extension cords, generator, horizontal and portable band saws, ladders, pedestal and portable grinder, pipe notcher, pneumatic post driver (50#), reciprocating saws, router and two-person posthole auger.

## **■ Related Topics**

Understand two- and four-cycle small engines; perform basic truck maintenance and procedures; load trucks and trailers; explain types of trailers and coupling systems and their uses; sharpen digging bars, chisels, etc.; tie the following knots and understand their uses: square, bowline, clove hitch and multiple half hitches as used in pulling or dragging; demonstrate cleanup and waste handling procedures in the field.